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CURRENT SERIAL RECORDS

**WATER SUPPLY OUTLOOK**  
and  
**FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS**  
for  
**UTAH**

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE,  
and  
STATE ENGINEER of UTAH

In cooperation with U.S. Forest Service, Bureau of Reclamation,  
Utah Fish and Game Dept., Utah Agricultural Experiment Station,  
U.S. National Park Service, U.S. Geological Survey; and other  
Federal, State, and private organizations.

||||||| AS OF |||||  
**FEB. 1, 1964**



# UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

## To Recipients of Water Supply Outlook Reports:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from advance estimates of the streamflow.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, up to 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1400 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

Streamflow forecasts are obtained by a comparison of total or maximum snow accumulation, as measured by snow water equivalent, to the subsequent spring and summer or snowmelt season runoff over a period of years. The snow water equivalent measured in selected snow courses provides most of the index to the streamflow forecast for the following season. More accurate forecasts are usually obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast procedure. Early season forecasts assume average climatic conditions through the snowmelt season.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions. Soil Conservation Service Reports may be secured from Water Supply Forecasting Unit, Soil Conservation Service, P.O. Box 2807, Portland, Oregon 97208.

### PUBLISHED BY SOIL CONSERVATION SERVICE

<u>REPORTS</u>	<u>ISSUED</u>	<u>LOCATION</u>	<u>COOPERATING WITH</u>
<b>RIVER BASINS</b>			
WESTERN UNITED STATES _____	MONTHLY (FEB.-MAY) _____	PORTLAND, OREGON _____	ALL COOPERATORS
BASIC DATA SUMMARY _____	OCTOBER 1 _____	PORTLAND, OREGON _____	ALL COOPERATORS
<b>STATES</b>			
ALASKA _____	MONTHLY (MAR.-MAY) _____	PALMER, ALASKA _____	ALASKA S.C.D.
ARIZONA _____	SEMI-MONTHLY _____ (JAN.15 - APR.1)	PHOENIX, ARIZONA _____	SALT R. VALLEY WATER USERS ASSOC. ARIZ. AGR. EXP. STATION
COLORADO AND NEW MEXICO _____	MONTHLY (FEB.-MAY) _____	FORT COLLINS, COLORADO _____	COLO. STATE UNIVERSITY COLO. STATE ENGINEER N. MEX. STATE ENGINEER
IDAHO _____	MONTHLY (JAN.-JUNE) _____	BOISE, IDAHO _____	IDAHO STATE RECLAMATION ENGINEER
MONTANA _____	MONTHLY (JAN.-JUNE) _____	BOZEMAN, MONTANA _____	MONT. AGR. EXP. STATION
NEVADA _____	MONTHLY (JAN.-MAY) _____	RENO, NEVADA _____	NEVADA DEPT. OF CONSERVATION AND NATURAL RESOURCES - DIVISION OF WATER RESOURCES
OREGON _____	MONTHLY (JAN.-JUNE) _____	PORTLAND, OREGON _____	OREG. STATE UNIVERSITY OREGON STATE ENGINEER
UTAH _____	MONTHLY (JAN.-JUNE) _____	SALT LAKE CITY, UTAH _____	UTAH STATE ENGINEER
WASHINGTON _____	MONTHLY (FEB.-JUNE) _____	SPOKANE, WASHINGTON _____	WN. STATE DEPT. OF CONSERVATION
WYOMING _____	MONTHLY (FEB.-JUNE) _____	CASPER, WYOMING _____	WYOMING STATE ENGINEER

### PUBLISHED BY OTHER AGENCIES

<u>REPORTS</u>	<u>ISSUED</u>	<u>AGENCY</u>
BRITISH COLUMBIA _____	MONTHLY (FEB.-JUNE) _____	WATER RESOURCES SERVICE, DEPT. OF LANDS, FOREST AND WATER RESOURCES, PARLIAMENT BLDG., VICTORIA, B.C., CANADA
CALIFORNIA _____	MONTHLY (FEB.-MAY) _____	CALIF. DEPT. OF WATER RESOURCES, P.O. BOX 388, SACRAMENTO, CALIF.

**WATER SUPPLY OUTLOOK**  
and  
**FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS**  
for  
**UTAH**

FEBRUARY 1, 1964

*Report prepared by*

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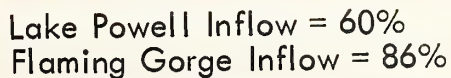
## Based on Snow Surveys Made on UTAH and BEAR RIVER WATERSHEDS

# UTAH and BEAR RIVER WATERSHEDS

50 0 50 100

SCALE IN MILES

*Underlined Figures = April-June*









# WATER SUPPLY OUTLOOK

as of

February 6, 1964

\* \* \* \* \*  
\* The water supply outlook for Utah varies from fair in \*  
\* northern areas to poor in the south. Streamflow fore- \*  
\* casts for southern watersheds range from about 25% to 65% \*  
\* of average, while most northern watersheds are expected \*  
\* to produce from about 60% to 90%. Storage in central and \*  
\* southern Utah reservoirs (Utah Lake, Strawberry Reservoir \*  
\* and those south of here) is near 45% of average. Storage \*  
\* in reservoirs north of here is about one fourth more than \*  
\* usual. \*  
\* \* \* \* \*

Following the pattern which has persisted so often during the past, the water supply outlook for Utah is much better in northern sections of the state than it is in the south. Although the entire state can expect below normal runoff next summer, water users in the north can anticipate fairly adequate supplies. In the south, however, serious shortages are expected.

Above average snowpack accumulation during January improved the water supply picture for watersheds north of Utah Lake. On southern and eastern watersheds, below normal snowfall darkened the outlook. On the Logan and Ogden rivers snowfall for the month was particularly good, varying from 108% to 225%. In the Salt Lake area, on the Weber river and Utah Lake drainage the snowpack increase varied from about 95% to near 170%. In the rest of the state, snowfall was mostly between 30% and 80% of average.

Along the Sevier River, streamflow forecasts generally range between 40% and 55%. Inflow to Rockyford Reservoir on the Beaver River should be near 27%, while above Beaver the forecast is for 58%. The Virgin River, streams near Cedar City, the Paria, Escalante, Fremont and Muddy Rivers are all expected to yield from about 55% to 60% of average.

Tributary streams of the San Pitch River from Mt. Pleasant to Mayfield are forecast at 72% to 76%, while forecasts range from 65% to 75% for inflow to Scofield Reservoir on the Price River and for the San Rafael tributaries near Huntington, Castledale and Ferron.

Forecasts for some of the poorer areas in the eastern and northern sections of the state are as follows: Strawberry Reservoir inflow - 57%, Hobbie Creek near Springville - 59%, Strawberry River near Duchesne - 44%, Lost Creek near Croydon and Chalk Creek near Coalville - 60%, Ashley Creek near Vernal - 61%. Inflow to Utah Lake is expected to be 63%, while its southern tributaries are forecast at near 70%.



## WATER SUPPLY OUTLOOK (continued)

The highest forecast in the state is for the American Fork River with 92% anticipated. The Cottonwood Creeks near Salt Lake, the Logan River and the higher elevation streams near Tooele and Farmington also have good prospects, with about 85% to 90% of average streamflow expected.

The Ogden River, Upper Bear, Weber, Provo and Duchesne Rivers, Uinta Basin streams from the Uintah Rivers westward to the Duchesne, streams of Cache Valley (excluding the Logan River) are all expected to yield from 75% to 80%.

Although anticipated inflow to Utah Lake and Strawberry Reservoir, along with current reservoir supplies in them are considerably below average, water supplies should be adequate for most uses next summer. However, carryover storage for next year will be near the minimum.





# UTAH STREAMFLOW FORECASTS <sup>a</sup> ( 1,000 Ac. Ft. )

FORECAST POINT	FORECAST THIS YEAR	FORECAST PERIOD	LAST YEAR	AVERAGE <sup>b</sup>	THIS YEAR AS PERCENT OF AVERAGE
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## GREAT BASIN

### BEAR RIVER SYSTEM

Bear nr Ut-Wyo. State Line	100	Apr-Sept	- -	123	81
Bear nr Woodruff	80	Apr-Sept	- -	133	60
Woodruff Crk nr Woodruff, Utah	14	Apr-Sept	- -	19.4*	72
Big Crk nr Randolph, Ut.	6.5	Apr-Sept	- -	9.7*	67
Bear nr Randolph	45	Apr-Sept	- -	115	39
Smith's Fork nr Border, Wyo.	106	Apr-Sept	- -	119	89
Bear at Harer, Idaho	195	Apr-Sept	- -	299	65
Little Bear nr Paradise	33	Apr-Sept	- -	46	72
Logan nr Logan (1)	125	Apr-Sept	103	143	87
Blacksmith Fork nr Hyrum (2)	50	Apr-Sept	- -	67	75

### WEBER-OGDEN RIVERS

Weber nr Oakley	86	Apr-June	82	107	80
	107	Apr-Sept	102	134	80
Wanship Reservoir Inflow (3)	85	Apr-July	- -	130*	65
Weber nr Coalville (4)	95	Apr-Sept	- -	143	66
Chalk Crk at Coalville	25	Apr-Sept	- -	42	60
Lost Crk nr Croydon, Ut	12	Apr-Sept	- -	19.9	60
East Canyon Crk nr Morgan (5)	20	Apr-Sept	- -	28.7	70
So. Fork Ogden nr Huntsville	55	Apr-Sept	- -	70	79
Pineview Reservoir Inflow (6)	115	Mar-July	93	142	81

### PROVO RIVER & UTAH LAKE

Strawberry Reservoir Inflow (7)	32	Apr-Sept	- -	56	57
Spanish Fork at Thistle	30	Apr-Sept	- -	43	70
Payson Creek nr Payson	5.7	Apr-Sept	- -	8.0*	71
Hobble Crk nr Springville	14	Apr-Sept	- -	23.7*	59
Provo nr Hailstone (8)	90	Apr-Sept	- -	116 *	76
Provo at Vivian Park (9)	105	Apr-Sept	- -	159	66
American Fork nr American Fork	33	Apr-Sept	25	36	92
Utah Lake Inflow	200	Apr-Sept	207	317	63

### JORDAN RIVER & SALT LAKE

Little Cottonwood Crk nr SLC	34	Apr-Sept	36	39	87
Big Cottonwood nr SLC	35	Apr-Sept	33	40	87
Parley's Crk nr SLC	10	Apr-Sept	7.1	14.7	68

(1) Includes U.P.&L. Co. tailrace and Logan, Hyde Park & Smithfield Canal. (2) Above Utah Power & Light Company's dam. (3) Observed flow Weber River near Wanship, Utah, plus change in storage in Wanship Reservoir, plus diversion by Weber-Provo Canal. (4) Includes diversion by Weber-Provo Canal and change in storage in Wanship Reservoir. (5) Observed flow plus change in storage in East Canyon Reservoir. (6) Inflow record as computed by U.S. Bureau of Reclamation. (7) Change in storage plus diversion thru Strawberry tunnel. (8) Observed flow minus diversions thru Duchesne tunnel and Weber-Provo Canal. (9) Observed flow plus change in Storage in Deer Creek reservoir, minus diversions thru Duchesne tunnel & Weber-Provo Canal, plus diversion thru Salt Lake Aqueduct.



# UTAH STREAMFLOW FORECASTS <sup>a</sup> ( 1,000 Ac. Ft. )

FORECAST POINT	FORECAST THIS YEAR	FORECAST PERIOD	LAST YEAR	AVERAGE <sup>b</sup>	THIS YEAR AS PERCENT OF AVERAGE
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## SEVIER RIVER

Sevier at Hatch	18	Apr-June	16.2	35	51
	25	Apr-Sept	25.0	49	51
Sevier nr Circleville	20	Apr-Sept	- -	43*	46
Sevier nr Kingston	6.5	Apr-June	- -	24.6	26
	8	Apr-Sept	- -	29.7	27
East Fork Sevier nr Kingston(10)	8	Apr-June	- -	17.2	46
	12	Apr-Sept	- -	21.6	56
Sevier below Piute Dam(11)	22	Apr-Sept	- -	51	43
Clear Crk nr Sevier(abv. Div.)	9	Apr-June	- -	15.9*	57
Inflow					
Kingston to Vermillion Dam	20	Apr-June	- -	47	43
Vermillion Dam to Gunnison	29	Mar-June	- -	63	46
Salina Crk at Salina(12)	1	Apr-June	- -	9.4*	11
Sevier nr Gunnison a	25	Apr-Sept	24.3	64	39

## SAN PITCH RIVER

Pleasant Crk nr Mt. Pleasant	7.8	Apr-Sept	- -	10.2*	76
Twin Crk nr Mt. Pleasant	3.6	Apr-Sept	- -	5.0*	72
Ephraim Creek nr Ephraim	12	Apr-Sept	- -	15.7	76

## BEAVER RIVER

Beaver nr Beaver	14	Apr-June	10.6	22.3	63
	17	Apr-Sept	14.4	29.4	58
Rockyford Reservoir Inflow(13)	2.5	Apr-June	- -	9.2	27

## COAL CREEK

Coal Crk nr Cedar City	11	Apr-Sept	- -	16.6	66
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## COLORADO RIVER BASIN

### GREEN RIVER TRIBUTARIES IN UTAH

### FLAMING GORGE TO DUCHESNE RIVER

Henry's Fork at Linwood	18	Apr-Sept	- -	40	45
Ashley Creek nr Vernal	36	Apr-Sept	- -	59	61

(10) Observed flow plus change in storage in Otter Creek Reservoir. (11) Observed flow plus change in storage in Otter Crk & Piute Reservoirs. (12) Gage is below diversions near Salina. (13) Observed flow at Rockyford Dam, corrected for change in storage in Rockyford Reservoir. (14) Observed flow plus diversion through Duchesne Tunnel. (15) Observed flow plus change in storage in Moon Lake Reservoir.





# UTAH STREAMFLOW FORECASTS <sup>a</sup> ( 1,000 Ac. Ft. )

FORECAST POINT	FORECAST THIS YEAR	FORECAST PERIOD	LAST YEAR	AVERAGE <sup>b</sup>	THIS YEAR AS PERCENT OF AVERAGE
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## DUCHESNE RIVER

Duchesne at Provo River (Trail nr Hanna)	32	Apr-Sept	- -	42*	76
Duchesne nr Tabiona (14)	90	Apr-Sept	- -	124	73
Rock Crk nr Mtn. Home	84	Apr-Sept	- -	109	77
Strawberry at Duchesne	35	Apr-Sept	- -	79	44
Lakefork below Moon Lake (15)	65	Apr-Sept	- -	78	83
Yellowstone nr Altonah	75	Apr-Sept	- -	79*	78
Uinta nr Neola	75	Apr-Sept	- -	101	74
Whiterocks nr Whiterocks	45	Apr-Sept	55	67	67

## PRICE RIVER

Gooseberry Crk nr Scofield	9	Apr-Sept	- -	12.6	71
Scofield Reservoir Inflow (16)	28	Apr-Sept	- -	40	70
Price nr Heiner (16)	40	Apr-Sept	- -	70	57

## SAN RAFAEL RIVER

Huntington Crk nr Huntington	44	Apr-Sept	- -	59	75
Cottonwood Crk nr Orangeville	40	Apr-Sept	- -	59	68
Ferron Crk nr Ferron	28	Apr-Sept	- -	43*	65

## MUDDY RIVER

Muddy Creek nr Emery	14	Apr-Sept	- -	23.1*	61
Ivie Creek abv. Div. nr Emery	1.1	Apr-Sept	- -	1.8*	61

## VIRGIN RIVER

Virgin at Virgin	25	Apr-June	18.0	44	57
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## UPPER COLORADO BASIN

Colorado nr Cisco, Utah	2650	Apr-Sept	1555	4059	65
Flaming Gorge Inflow (17)	1100	Apr-July	645	1285	86
Green at Green River, Utah (17)	2750	Apr-Sept	1835	3540	78
San Juan nr Bluff, Utah (18)	500	Apr-Sept	565	1226	41
Lake Powell Inflow (a)	4900	Apr-July	3679	8100	60

(a) Observed flow at Lee's Ferry plus change in storage in Flaming Gorge, Navajo, Lake Powell and Big Sandy.

(16) Observed flow plus change in storage in Scofield Reservoir. (17) Observed flow plus change in storage in Flaming Gorge and Big Sandy Reservoirs. (18) Observed flow plus change in storage in Navajo Reservoir.

### GENERAL FOOTNOTES

(a) Runoff forecasts are based principally on mountain snow cover and on the assumption that precipitation and temperature will be near average from the present time to the end of the forecast period. Appreciable deviations from normal of temperature and/or precipitation will correspondingly modify these forecasts. The discharge data is taken from preliminary records of the U.S. Geological Survey. (b) 1943-57, 15 year period. \*Partly estimated.



# RESERVOIR STORAGE ( 1,000 Ac. Ft. )

BASIN or STREAM		RESERVOIR	USABLE CAPACITY	MEASURED ( FIRST OF MONTH)		
				THIS YEAR	LAST YEAR	AVERAGE <sup>a</sup>
GREAT BASIN						
<u>Bear River</u>	Bear Lake	1421.0	709.3	721.3	806.4	
	Woodruff Narrows	26.5	11.9	- -	- -	
<u>Little Bear</u>	Hyrum	15.3	13.4	9.2	10.7	
	Porcupine	11.3	- -	2.1c	- -	
<u>Ogden</u>	Pineview	110.0	53.6	55.6	7.0	
<u>Weber</u>	Rockport	59.1	25.9	33.2	- -	
	Echo	73.9	34.7	28.4	27.0	
	East Canyon	28.7	18.9	17.0	15.2	
<u>Provo</u>	Deer Creek	149.7	99.0	123.0	83.1	
<u>Spanish Fork</u>	Strawberry	270.0	53.1	48.7	131.9	
<u>Utah Lake</u>	Utah Lake (b)	1149.0	261.9	244.5	568.2	
<u>Sevier River</u>	Otter Creek	52.5	13.6	17.4	27.5	
	Piute	74.0	16.9	25.0	38.0	
	Sevier Bridge	236.0	36.6	44.1	134.6	
<u>Beaver River</u>	Rocky Ford	23.3	5.9	6.9	13.6	
COLORADO RIVER DRAINAGE						
<u>Ashley Creek</u>	Steinaker	33.3	8.3	- -	- -	
<u>Lake Fork</u>	Moon Lake	35.8	19.0	14.6	12.4	
<u>Price River</u>	Scofield	65.8	10.0	17.1	15.2	
<u>Green</u>	Flaming Gorge	3789.0*	893.2	53.6*	- -	
<u>San Juan</u>	Navajo	1709.0*	332.0	77.3*	- -	
<u>Colorado</u>	Lake Powell	27,000.0*	3,113.0	34.5*	- -	

All data contained in this table supplied by the U.S. Geological Survey.

(a) 1943-57 average. (b) Active capacity taken at 3.1 feet above compromise point. (c) Partly estimated.





# COMPARISON of SNOW COVER

RIVER BASIN or TRIBUTARY WATERSHED	NO. of COURSES AVERAGE	THIS YEARS SNOW WATER EXPRESSED AS PERCENT OF :	
		LAST YEAR	AVERAGE *

## GREAT BASIN

Smith's Fork - Bear River (Wyo)	4	199	94
Mink Creek - Cub River	3	211	87
Logan River	3	285	89
Blacksmith Fork	5	231	78
Malad River (Idaho)	1	475	121
Ogden River	5	227	86
Weber River above Echo Dam	8	176	70
Chalk Creek - Coalville	2	134	75
East Canyon Creek	3	201	77
Farmington Creek	2	180	82
Salt Lake Area	4	194	77
Tooele Area	1	198	100
American Fork River	2	689	61
Provo River above Vivian Park	7	148	62
Strawberry Reservoir Valley	3	265	50
Spanish Fork River	4	226	74
Mt. Nebo Area	2	172	80
Sevier River above Panguitch	3	499	42
East Fork Sevier River	4	178	47
Salina Creek	2	112	80
San Pitch River	4	208	66
Beaver River	3	242	40
Coal Creek - Cedar City	3	316	48

## COLORADO RIVER BASIN

Duchesne-Strawberry Rivers	5	134	48
Lakefork River	3	975	44
Whiterocks-Uintah Rivers	3	79	30
Price River	5	200	48
San Rafael Tributaries	6	167	45
Escalante River	3	200	56
Virgin River	4	429	42

\* Actual or Estimated 1943-57, 15 year Average.



## SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE <sup>a</sup>

## GREAT BASIN DRAINAGE

UPPER BEAR RIVER  
(Above Harer, Idaho)

Big Park	10G11	8700	1/31	48	12.6	4.7	- -
CCC Camp x	10G7	7500	1/30	36	8.0	5.0	8.3
Monte Cristo R.S.	11H12	8960	1/29	46	11.5	7.4	17.0*
Piney LaBarge x	10G10	8820	1/27	46	11.4	6.2	13.0*
Salt River Summit x	10G8	7900	1/30	45	10.3	5.6	10.5*
Trial Lake x	10J8	9800	1/30	42	10.4	6.5	17.1*

LOWER BEAR RIVER  
(Below Harer, Idaho)

Beaver Crk-Skunk Crk.x	11H14	7150	1/29	27	6.2	2.4	8.5*
Christensen Ranch	11G11	5600	1/28	26	5.9	2.6	6.4*
Cub River R.S.	11G12	5400	1/27	33	6.6	3.2	5.9*
Dry Basin A	11G13	7900	2/2	57	16.0	- -	- -
Dry Bread Pond x	11H13	8230	1/29	35	8.7	4.8	12.3*
Dry Creek Flat	12G4	6350	2/3	23	5.7	1.2	4.7*
Emigrant Summit	11G6	7700	1/30	48	13.5	5.4	- -
Garden City Summit	11H7	7600	1/28	43	10.6	4.2	12.5*
Horseshoe Basin A	11G14	8000	2/2	50	14.0	- -	- -
Klondike Narrows	11H1	7400	1/28	48	11.2	3.8	12.3*
Liberty Spring	11G15	8420	2/2	69	19.4	- -	- -
Monte Cristo R.S.	11H12	8960	1/29	46	11.5	7.4	17.0*
Oxford Mountain	12G3	6800	No Report			1.5	6.3*
Steep Hollow #1	11H27	8500	1/28	73	19.3	7.2	- -
Steep Hollow #2	11H28	7700	1/28	58	15.1	5.7	- -
Strawberry Creek	11G9	5800	1/28	33	7.3	3.4	7.7*
Strawberry Mink Divide	11G10	6800	1/29	46	12.0	7.1	13.6
Tony Grove R.S.	11H3	6250	1/28	33	7.4	2.4	8.0*
Willow Flat	11G4	6100	1/27	45	10.4	4.2	13.5*

## OGDEN RIVER

Beaver Crk-Skunk Crk.	11H14	7150	1/29	27	6.2	2.4	8.5*
Ben Lomond(lower)	11H9	5850	1/30	45	11.4	3.5	9.0*
Ben Lomond Peak	11H8	8000	1/30	71	19.5	9.1	21.0*
Ben Lomond Trail	11H30	6000	1/30	49	11.9	3.4	- -
Cutler Creek	11H29	6780	1/30	64	16.6	6.7	- -
Dry Bread Pond	11H13	8230	1/29	35	8.7	4.8	12.3*
Monte Cristo R. S.	11H12	8960	1/29	46	11.5	7.4	17.0*
Sagebrush Flat	11H15	6300	1/29	24	5.4	1.2	4.2*

(a) 1943-57, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation: Water content estimated. \* Estimated 1943-57, 15 year average.





# SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE <sup>a</sup>

## WEBER RIVER

Beaver Creek R. S.	11J24	7500	1/30	18	3.7	2.1	6.2*
Chalk Creek #2	11J2	8000	1/27	29	6.2	3.8	9.5*
Chalk Creek #3	11J3	7500	1/27	21	4.3	2.1	5.1*
Farmington Canyon(lower)	11J12	6950	1/31	45	12.1	5.9	14.4*
Farmington Canyon(upper)	11J11	8000	1/31	49	13.1	8.4	16.4*
Lamb's Canyon x	11J14	6600	1/31	32	7.0	4.0	10.0*
Parley's Canyon Smt.	11J15	7500	2/1	37	10.2	4.6	11.5*
Silver Lake x	11J16	8725	1/30	46	12.0	5.8	16.8
Smith & Morehouse	11J4	7600	1/29	24	5.5	5.7	8.6*
Trial Lake x	10J8	9800	1/30	42	10.4	6.5	17.1*

## PROVO RIVER & UTAH LAKE

Camp Altamont	11J20	7300	1/30	30	7.2	0.6	12.9
Clear Creek Ridge #2	11K22	8000	1/29	29	6.3	3.3	8.5*
Clear Creek Ridge #3	11K23	6600	1/29	17	3.3	0.9	5.2*
Daniels-Strawberry Smt.	11J23	8000	1/31	23	5.1	7.6	10.5
East Portal	11J7	7560	1/29	18	3.8	1.2	8.7
Payson R. S.	11K1	8050	1/31	31	7.8	4.6	11.0*
Rock Bridge	11K2	6750	1/31	26	6.8	3.9	7.7*
Soapstone R. S.	11J25	7800	1/30	23	4.8	6.5	8.8*
South Fork R. S.	11J19	6100	1/30	20	5.4	0.6	5.9*
Strawberry Divide	11J8	8000	1/29	37	8.2	2.0	14.5
Timpanogos Cave Camp	11J18	5500	1/30	17	3.9	0.4	3.6*
Timpanogos Divide	11J21	8140	1/30	40	12.8	7.2	19.4
Trial Lake	10J8	9800	1/30	42	10.4	6.5	17.1*

## JORDAN RIVER & TOOELE VALLEY

Lamb's Canyon	11J14	6600	1/31	32	7.0	4.0	10.0*
Middle Canyon	12J3	7000	1/29	31	8.3	4.2	8.3*
Mill D South Fork	11J10	7400	1/30	41	9.7	5.6	12.5*
Parley's Canyon Smt. x	11J15	7500	2/1	37	10.2	4.6	11.5*
Silver Lake	11J16	8725	1/30	46	12.0	5.8	16.8

## UPPER SEVIER RIVER

(South of Richfield, Utah)

Big Flat x	12L7	10290	1/28	23	5.0	2.9	11.3*
Bryce Canyon	12M8	8000	1/29	8	1.0	0.9	3.3*
Duck Creek R. S.	12M4	8560	1/30	16	3.0	0.5	9.5*
Harris Flat R.S.	12M5	7700	1/30	13	2.2	0.4	6.0*
Long Valley Junction x	12M6	7500	1/30	9	1.4	T	4.2*
Midway Valley	12M2	9800	1/30	34	8.3	2.4	14.5*
Widtsoe-Escalante Smt.	11M1	9500	1/29	12	2.9	1.1	5.5*
Widtsoe-Escalante #2	11M2	9500	1/29	15	3.8	1.8	6.6*
Widtsoe-Escalante #3	11M3	9500	1/29	19	4.2	3.4	- -

(a) 1943-57, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation: Water content estimated. \* Estimated 1943-57, 15 year average.



# SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE <sup>a</sup>

## LOWER SEVIER RIVER (Including San Pitch River)

Farnsworth Lake	11L1	9900	1/29	28	7.9	8.0	11.3*
G.B.R.C. Headquarters	11K11	8700	1/30	24	6.3	4.6	9.1*
G.B.R.C. Meadows	11K10	10000	1/30	36	9.3	7.6	15.6*
Gooseberry R.S.	11L2	8400	1/29	23	6.2	5.0	7.0*
Gooseberry Reservoir x	11K4	8700	1/28	28	7.8	1.6	11.5*
Mammoth R.S.-Cotnwd Crk.	11K3	8800	1/28	31	8.0	9.4	12.1
Shingle Mill	12L11	6200	1/30	20	4.9	2.7	- -

## BEAVER RIVER

Big Flat	12L7	10290	1/28	23	5.0	2.9	11.3*
Merchant's Valley	12L9	8200	1/28	10	1.6	0.5	6.5*
Otter Lake	12L8	9300	1/28	24	4.7	2.0	9.2*

## COAL CREEK

Midway Valley x	12M2	9800	1/30	34	8.3	2.4	14.5*
Urie Flat	12M10	8450	1/30	10	2.3	0.6	5.0*
Webster Flat	12M3	9200	1/30	23	4.6	2.1	11.2*

## COLORADO RIVER DRAINAGE

### UPPER GREEN RIVER IN UTAH (Tributaries above Flaming Gorge)

Buck Pasture A	10J23	9700	Delayed Report			5.0A	- -
Henry's Fork A	10J24	10200	Delayed Report			N.R.	- -
Steel Creek Park A	10J20	9900	Delayed Report			2.4A	- -

## DUCHESNE RIVER

Ashley Twin Lakes A	9J11	10500	Delayed Report			3.8A	- -
Atwood Basin A	10J27	10250	Delayed Report			2.9A	- -
Chepeta-Whiterocks Lakes A	9J9	10300	Delayed Report			4.1A	- -
Daniels-Strawberry Smt.x	11J23	8000	1/31	23	5.1	7.6	10.5
East Portal x	11J7	7560	1/29	18	3.8	1.2	8.7
Five Point Lake A	10J26	11000	Delayed Report			6.5A	- -
Indian Canyon	10K1	9100	1/30	13	2.7	5.3	8.6*
Julius Park	9J6	9800	1/30	21	4.2	4.5	- -
Lakefork Basin A	10J25	11100	Delayed Report			N.R.	- -
Lakefork Mountain	10J10	10500	1/29	23	5.2	0.4	8.1*
Lakefork Mountain #2	10J11	8900	1/29	12	1.9	0.0	6.0*
Lakefork Mountain #3	10J12	8100	1/29	8	1.3	0.2	4.8*

(a) 1943-57, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation: Water content estimated. \* Estimated 1943-57, 15 year average.



# SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE <sup>a</sup>

## DUCHESNE RIVER - Continued

Mosby Mountain	9J5	9500	1/30	14	2.1	4.2	7.7*
Paradise Park	9J3	10100	1/30	14	2.8	3.3	8.7*
Reynolds Park A	9J10	10400	Delayed Report			- -	- -
Soapstone R. S. x	11J25	7800	1/30	23	4.8	6.5	8.8*
Strawberry Divide	11J8	8000	1/29	18	3.8	2.0	14.5
Trial Lake	10J8	9800	1/30	42	10.4	6.5	17.1*
Windy Park A	9J12	9400	Delayed Report			1.9	- -

## PRICE RIVER

Dry Valley Divide	11K8	7800	1/31	15	2.4	1.2	8.0*
Gooseberry Reservoir	11K4	8700	1/28	28	7.8	1.6	11.5*
Indian Canyon x	10K1	9100	1/30	13	2.7	5.3	8.6*
Jones Ranch	11K7	7600	1/31	9	1.2	0.6	5.5*
Mammoth R.S.-Ctnwd.Crk.x	11K3	8800	1/28	31	8.0	9.4	12.1*
Mud Creek #2	11K33	8300	1/31	19	3.7	2.1	8.3*

## SAN RAFAEL RIVER

Buck Flat	11K31	9400	1/30	22	4.5	9.4	10.0*
Gooseberry Reservoir	11K4	8700	1/28	28	7.8	1.6	11.5*
Mammoth R.S.-Ctnwd Crk.x	11K3	8800	1/28	31	8.0	9.4	12.1*
Red Pine Ridge	11K28	9400	1/29	26	5.7	2.4	10.9*
Ruch Pond	11K38	9800	1/30	20	3.6	7.7	9.2*
Upper Joe's Valley	11K29	8800	1/29	12	1.8	1.4	6.0*
Wrigley Creek	11K32	9000	1/30	15	2.3	4.6	6.8*

## FREMONT RIVER

Farnsworth Lake x	11L1	9900	1/29	28	7.9	8.0	11.3*
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## ESCALANTE RIVER

Widtsoe-Escalante Smt.	11M1	9500	1/29	12	2.9	1.1	5.5*
Widtsoe-Escalante #2	11M2	9500	1/29	15	3.8	1.8	6.6*
Widtsoe-Escalante #3	11M3	9500	1/29	19	4.2	3.4	- -

## VIRGIN RIVER

Duck Creek R.S.	12M4	8560	1/30	16	3.0	0.5	9.5*
Harris Flat R.S.	12M5	7700	1/30	13	2.2	0.4	6.0*
Long Valley Junction	12M6	7500	1/30	9	1.4	T	4.2*
Midway Valley x	12M2	9800	1/30	34	8.3	2.4	14.5*
Webster Flat	12M3	9200	1/30	23	4.6	2.1	11.2*

(a) 1943-57, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation: Water content estimated. \* Estimated 1943-57, 15 year average.





# PRECIPITATION DATA (Inches)

DRAINAGE BASIN AND RAIN GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. 10/1 TO DATE		
		DATE OF READING	MONTH'S PRECIPITATION	1943-57 AVERAGE	THIS YEAR	1943-57 AVERAGE	PERCENT OF AVERAGE

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## GREAT BASIN DRAINAGE

### UPPER BEAR RIVER (Above Harer, Idaho)

Chalk Creek #2*	8000	1/27	- -	- -	9.26	11.76	79
Chalk Creek #3*	7500	1/27	- -	- -	7.41	- -	--
Monte Cristo #2	8960	1/29	- -	- -	13.08	- -	--
Salt River Summit	7900	1/30	4.60	3.60	11.50	12.90	89
Trial Lake*	9800	1/30	4.51	4.75	9.26	16.15	57

### LOWER BEAR RIVER (Below Harer, Idaho)

Dry Bread Pond	8230	1/29	- -	- -	10.83	15.50	70
Garden City Summit	7600	1/28	4.59	3.30	11.41	12.40	92
Klondike Narrows	7400	1/28	6.54	4.10	14.39	15.45	93
Monte Cristo #2	8960	1/29	- -	- -	13.08	- -	--
Tony Grove R.S.(SCS)	6250	1/28	4.30	- -	9.37	- -	--
Willow Flat	6100	1/27	- -	- -	11.40	16.29	70

### OGDEN RIVER

Ben Lomond(lower)	5850	1/30	6.99	4.75	16.38	17.80	92
Ben Lomond Trail	6000	1/30	7.15	- -	17.01	- -	--
Causey Dam	5500	1/29	3.25	- -	- -	- -	--
Dry Bread Pond	8230	1/29	- -	- -	10.83	15.50	70
Monte Cristo #2*	8960	1/29	- -	- -	13.08	- -	--
Sagebrush Flat	6300	1/29	- -	- -	7.93	10.15	78

### WEBER RIVER

Chalk Creek #2	8000	1/27	- -	- -	9.26	11.76	79
Chalk Creek #3	7500	1/27	- -	- -	7.41	- -	--
Farmington Guard Sta.(1)	7500	1/31	6.68	5.43a	14.88	20.57a	72
Farmington Rice (1)	7000	1/31	6.52	5.00a	14.51	18.52a	78
Parley's Canyon Smt.	7500	2/1	5.55	3.33	11.34	13.87	82
Silver Lake(Brighton)*(2)	8725	1/31	6.73	5.60a	14.20	19.57a	73
Smith & Morehouse	7600	1/29	3.66	3.20	9.41	12.20	77
Trial Lake*	9800	1/30	4.51	4.75	9.26	16.15	57

(1) Data supplied by U.S. Forest Service

(2) Data supplied by U.S. Weather Bureau

\* Adjacent Drainage

a All values estimated except those where symbol  
"a" occurs



# PRECIPITATION DATA (Inches)

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		DATE OF READING	MONTH'S PRECIPITATION	1943-57 AVERAGE	THIS YEAR	1943-57 AVERAGE	PERCENT OF AVERAGE

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## PROVO RIVER & UTAH LAKE

Clear Creek Ridge #2	8000	1/29	- -	- -	6.95	10.90	64
Daniels-Strawberry Smt.	8000	1/31	3.54	2.05	7.97	11.10	72
East Portal Ridge	7800	1/29	4.25	- -	8.54	- -	--
Payson R. S.	8050	1/31	5.50	3.40	10.44	12.50	84
Soapstone R. S.	7800	1/30	3.75	3.05	10.09	11.75	86
Strawberry Res.-E. Portal	7606	1/29	1.75	1.30	5.54	6.65	83
Timpanogos Divide	8200	1/30	3.75	5.82a	14.29	18.87a	76
Trial Lake	9800	1/30	4.51	4.75	9.26	16.15	57

## JORDAN RIVER & TOOELE VALLEY

Middle Canyon	7000	1/29	4.08	2.36	11.14	11.80	94
Mt. Dell Dam (2)	5500	1/31	3.26	2.15a	7.60	9.15a	83
Parley's Canyon Smt.	7500	2/1	5.55	3.33	11.34	13.87	82
Silver Lake(Brighton)(2)	8725	1/31	6.73	5.60a	14.20	19.57a	73

## SEVIER RIVER ABOVE RICHFIELD

Big Flat	10290	1/28	- -	- -	5.97	10.98	54
Duck Creek R.S.	8560	1/30	3.00	4.40	7.23	10.75	67
Webster Flat*	9200	1/30	1.96	4.50	7.25	11.20	65
Widtsoe-Escalante #3	9500	1/29	1.57	2.45	5.42	8.23	66
Widtsoe R. S.	7600	1/29	0.43	0.87a	2.05	3.55a	58

## SEVIER RIVER BELOW RICHFIELD (Including San Pitch River)

Farnsworth Lake	9900	1/29	3.58	4.20	8.38	11.50	73
G.B.R.C. Headquarters (1)	8700	1/30	2.13	3.49a	7.95	11.76a	68
G.B.R.C. Meadows (1)	10000	1/30	3.15	3.36a	9.80	12.30a	80
G.B.R.C. Oaks (1)	7655	1/30	1.27	2.16a	5.43	8.24a	66
Gooseberry R. S. (1)	7800	1/29	2.14	2.51	5.95	8.10	73
Gooseberry Reservoir *	8700	1/28	2.77	3.80	8.18	11.60	71
Mammoth R. S. #2*	8600	1/28	3.08	3.80	8.73	11.55	76
Shingle Mill	6200	1/30	1.32	- -	6.47	- -	--

## BEAVER RIVER

Beaver Canyon P.H. (2)	7275	1/31	0.80	2.26a	3.15	6.48a	49
Big Flat	10290	1/28	- -	- -	5.97	10.98	54

## COAL CREEK

Webster Flat *	9200	1/30	1.96	4.50	7.25	11.20	65
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(1) Data supplied by U. S. Forest Service

(2) Data supplied by U. S. Weather Bureau

\* Adjacent Drainage

a All values estimated except those where symbol "a" occurs





# PRECIPITATION DATA (Inches)

DRAINAGE BASIN AND RAIN GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. 10/1 TO DATE		
		DATE OF READING	MONTH'S PRECIPITATION	1943-57 AVERAGE	THIS YEAR	1943-57 AVERAGE	PERCENT OF AVERAGE

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## COLORADO RIVER DRAINAGE

### DUCHESNE RIVER

Daniels-Strawberry Smt.*	8000	1/31	3.54	2.05	7.97	11.10	72
East Portal Ridge*	7800	1/29	4.25	- -	8.54	- -	--
Indian Canyon	9100	1/30	1.18	- -	3.68	- -	--
Julius Park	9800	1/30	1.20	3.00	4.32	10.50	41
Lakefork Mountain	10500	1/29	- -	- -	6.20	9.85	63
Moon Lake	8150	1/31	0.60	2.03a	3.00	6.71a	45
Paradise Park	10100	1/30	1.55	3.25	5.15	11.00	47
Soapstone R. S. *	7800	1/30	3.75	3.05	10.09	11.75	86
Strawberry Res.-E.Portal*	7606	1/29	1.75	1.30	5.54	6.65	83
Trial Lake*	9800	1/30	4.51	4.75	9.26	16.15	57

### PRICE RIVER

Clear Creek Ridge #2*	8000	1/29	- -	- -	6.95	10.90	64
Gooseberry Reservoir	8700	1/28	2.77	3.80	8.18	11.60	71
Indian Canyon	9100	1/30	1.18	- -	3.68	- -	--
Mammoth R. S. #2	8600	1/28	3.08	3.80	8.73	11.55	76
Mud Creek	8300	1/31	2.30	3.65	5.45	11.00	50

### SAN RAFAEL RIVER

Buck Flat	9400	1/30	- -	- -	5.85	10.60	55
G.B.R.C. Meadows* (1)	10000	1/30	3.15	3.36a	9.80	12.30a	80
Gooseberry Reservoir *	8700	1/28	2.77	3.80	8.18	11.60	71
Red Pine Ridge	9400	1/29	- -	- -	6.75	12.87	52

### FREMONT & ESCALANTE RIVERS

Farnsworth Lake *	9900	1/29	3.58	4.20	8.38	11.50	73
Widtsoe-Escalante #3	9500	1/29	1.57	2.45	5.42	8.23	66

### VIRGIN RIVER

Duck Creek R. S.	8560	1/30	3.00	4.40	7.23	10.75	67
Webster Flat	9200	1/30	1.96	4.50	7.25	11.20	65

(1) Data supplied by U. S. Forest Service

(2) Data supplied by U. S. Weather Bureau

\* Adjacent Drainage

a All values estimated except those where  
symbol "a" occurs



# Agencies Cooperating in Utah Snow Surveys

## U. S. GOVERNMENT AGENCIES

U. S. Department of Agriculture  
Soil Conservation Service  
Forest Service  
U. S. Department of Commerce  
Weather Bureau  
U. S. Department of Interior  
Bureau of Reclamation  
Geological Survey  
National Park Service

## STATE AGENCIES

Utah Agricultural Experiment Station  
Utah Fish and Game Department  
Utah State Engineer  
Bear River Commissioner  
Price River Commissioner  
Provo River Commissioner  
Sevier River Commissioners  
Spanish Fork River Commissioner  
Utah Lake and Jordan River Commissioner  
Utah Water and Power Board

## MUNICIPALITIES

Manti  
Salt Lake City

## ORGANIZED PUBLIC AGENCIES

Beaver River Water Users Association  
Board of Canal Presidents - Jordan River  
Emery Canal and Reservoir Company  
Moon Lake Water Users Association  
Ogden River Water Users Association  
Provo River Water Users Association  
Strawberry Water Users Association  
Sevier River Water Users Association

## PRIVATE AGENCIES

Kaiser Steel Corporation

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with the Snow Survey"*